WEED ABSTRACTS

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UNDER THE DIRECTION OF J.D. FRYER

The journal is published monthly by the Commonwealth Agricultural Bureaux as one of a series of abstract journals covering the major branches of agricultural science.

The object of *Weed Abstracts* is to provide factual summaries and reports of the world scientific and technical literature on weeds, weed control and allied subjects as a means of enabling readers to keep abreast of current developments and to act as a concise source of reference.

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Abbreviations

abs.	abstract	in	inch	pp.	pages
a.e.	acid equivalent	in^2	square inch	p.p.m.	parts per million
a.i.	active ingredient	IR	infra-red	p.p.m.v.	parts per million by volume
b.p.	boiling point	kcal	kilocalorie		
bu	bushel	kg	kilogramme	p.p.m.w.	parts per million by weight
°C	degrees Celsius (formerly Centigrade)	LC_{50}	median lethal concentration (median tolerance limit or TL_m)	pre-em.	pre-emergence
				p.t.o.	power take off
conc.	concentrated			pt	pint
concn.	concentration	LD_{50}	median lethal dose	ref.	references
cv.	cultivar(s)	lb	pound	RH	relative humidity
cwt	hundredweight	lbf/in^2	pounds-force per square inch	s	second
d.b.h.	diameter at breast height	M	molar concentration	sp.	species
		m	metre	spp.	species (plural)
diam.	diameter	m-	milli-(x 10^{-3})	ssp.	subspecies
DM	dry matter			t	tonne (Mg)
dz	Doppelzentner (= 100 kg	μ-	micro (x 10^{-6})	temp.	temperature
		μm	micron	TLC	thin-layer chromatography
e.c.	emulsifiable concentrate	m^2	square metre		
		m.c.	moisture content	u.l.v.	ultra low volume
°F	degrees Fahrenheit	mg	milligramme	UV	ultra-violet
ft	foot	min	minute	var.	*varietas*
ft^2	square foot	ml	millilitre	vol.	volume
g	gramme	mm	millimetre	wt	weight
gal	gallon	m.p.	melting point	w.p.	wettable powder
GLC	gas-liquid chromatography	N	normal concentration	yd	yard
		n	nano-(x 10^{-9})	>	more than
h	hour	OM	organic matter	<	less than
ha	hectare	oz	ounce	±	with or without
hkg	hectokilogramme	p.	page	%	percent(age)
hp	horsepower	post-em.	post-emergence		

Languages

An initial capital denotes the language of the paper, an initial small letter the language of the summary.

Af	Afrikaans	Fi	Finnish	It	Italian	Ru	Russian
Bg	Bulgarian	Nl	Flemish	Ja	Japanese	Sh	Serbo-Croat
Cs	Czech	Fr	French	No	Norwegian	Sk	Slovak
Da	Danish	De	German	Pl	Polish	Es	Spanish
Nl	Dutch	He	Hebrew	Pt	Portuguese	Sv	Swedish
En	English	Hu	Hungarian	Ro	Romanian	Tr	Turkish

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Use of 'a.i.', 'a.e.' etc. Unless otherwise stated, rates of application for growth-regulator herbicides such as 2,4-D, MCPA, fenoprop, dalapon, the benzoics, etc. are given as the acid equivalent. Rates for other herbicides such as the ureas, carbamates, triazines, etc. are given as the active ingredient. Rates for the bipyridyls refer to the cation, only.

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t of common names and abbreviations employed for currently used herbicides and plant growth ulators in *Weed Abstracts*

asterisk (*) signifies approval by the British Standards Institution (BSI)
agger (†) signifies approval by the Weed Science Society of America (WSSA) or ANSI
ouble dagger (‡) signifies approval by the International Organization for Standardization (I.S.O.)
ere the name approved by the WSSA or the I.S.O. differs from that approved by the BSI, the WSSA or I.S.O. name is given in brackets osite the chemical name, with the appropriate symbol attached.

fluorfen*†‡	5-(2-chloro-4-trifluoromethylphenoxy)-2-nitrobenzoic acid	
blein	acrylaldehyde	
chlor*†‡	α-chloro-2,6-diethyl-*N*-(methoxymethyl)acetanilide	
dochlor*‡	*N*,*N*-diallylchloroacetamide	(CDAA†)
xydim*	2-[1-(*N*-allyloxyamino)butylidene]-4-methoxycarbonyl-5,5-dimethylcyclohexane-1,3-dione	
etridione*	1-amino-6-ethylthio-3-neopentyl-1,3,5-triazine-2,4-dione	
etryne*	4-ethylamino-6-isopropylamino-2-methylthio-1,3,5-triazine	(ametryn†)
inotriazole	3-amino-1,2,4-triazole	(amitrole†‡)
iprofos-methyl*	*O*-methyl *O*-(4-methyl-2-nitrophenyl) *N*-isopropylphosphoramidothionate	
S†	ammonium sulphamate	
ymidol*‡	α-cyclopropyl-4-methoxy-α-pyrimidin-5-ylbenzyl alcohol	
dofos*	*S*-4-chloro-*N*-isopropylcarbanilоylmethyl *O*,*O*-dimethyl phosphorodithioate	
lam*†‡	methyl (4-aminobenzenesulphonyl)carbamate	
aton*†‡	4-ethylamino-6-isopropylamino-2-methoxy-1,3,5-triazine	
azine*†‡	2-chloro-4-ethylamino-6-isopropylamino-1,3,5-triazine	
protryne*‡	2-azido-4-isopropylamino-6-methylthio-1,3,5-triazine	
ban*†‡	4-chlorobut-2-ynyl *N*-(3-chlorophenyl)carbamate	
nazolin*‡	4-chloro-2-oxobenzothiazolin-3-ylacetic acid	
nfluralin*‡	*N*-butyl-*N*-ethyl-2,6-dinitro-4-trifluoromethylaniline	(benefin†)
nsulide*†‡	*N*-[2-(*O*,*O*-di-isopropyldithiophosphoryl)ethyl] benzene sulphonamide	
ntazone*‡	3-isopropyl-2,1,3-benzothiadiazin-4-one 2,2-dioxide	(bentazon†)
nzadox*†	benzamido-oxyacetic acid	
nzoylprop-ethyl*‡	ethyl *N*-benzoyl-*N*-(3,4-dichlorophenyl)-2-aminopropionate	(benzoylprop† [acid])
nzthiazuron*‡	*N*-(benzothiazol-2-yl)-*N*-methylurea	
enox†	methyl 5-(2,4-dichlorophenoxy)-2-nitrobenzoate	
omacil*†‡	5-bromo-6-methyl-3-(1-methyl-n-propyl) uracil	
omofenoxim*‡	3,5-dibromo-4-hydroxybenzaldehyde 2,4-dinitrophenyloxime	
omoxynil*†‡	3,5-dibromo-4-hydroxybenzonitrile	
minafos*	dibutyl 1-butylaminocyclohexylphosphonate	
tachlor*†	*N*-(butoxymethyl)-α-chloro-2,6-diethylacetanilide	
tam†	*N*-benzyl-*N*-isopropyl-2,2-dimethylpropionamide	
tamifos*‡	*O*-ethyl *O*-(5-methyl-2-nitrophenyl) *N*-s-butylphosphoramidothionate	
thidazole*†	4-hydroxy-1-methyl-3-(2-t-butyl-1,3,4-thiadiazol-5-yl)imidazolidin-2-one	
thiuron*	*N'*-(5-butylsulphonyl-1,3,4-thiadiazol-2-yl)-*N*,*N'*-dimethylurea	
tralin*†	*N*-s-butyl-4-t-butyl-2,6-dinitroaniline	
turon*†‡	*N'*-(4-chlorophenyl)-*N*-(1-methylprop-2-ynyl)-*N*-methylurea	
tylate*†‡	*S*-ethyl *N*,*N*-di-isobutyl(thiocarbamate)	
mbendichlor*†‡	*N*-phenylimino diethylene bis(3,6-dichloro-2-methoxybenzoic acid)	
rbetamide*†‡	D-*N*-ethyl-2-(phenylcarbamoyloxy)propionamide	
loramben*†‡	3-amino-2,5-dichlorobenzoic acid	
loranocryl*‡	*N*-(3,4-dichlorophenyl)methacrylamide	(dicryl†)
lorbromuron*†‡	*N'*-(4-bromo-3-chlorophenyl)-*N*-methoxy-*N*-methylurea	
lorbufam*‡	1-methylprop-2-ynyl *N*-(3-chlorophenyl)carbamate	
loreturon*	*N'*-(3-chloro-4-ethoxyphenyl)-*N*,*N*-dimethylurea	
lorfenac*‡	2,3,6-trichlorophenylacetic acid	(fenac†)
lorfenprop-methyl*‡	methyl 2-chloro-3-(4-chlorophenyl)propionate	
lorflurecol*	2-chloro-9-hydroxyfluorene-9-carboxylic acid	(chlorflurenol‡)
lorfluren*‡	2-chlorofluorene-9-carboxylic acid	
loridazon*	5-amino-4-chloro-2-phenylpyridazin-3(2*H*)-one	(pyrazon†)
lormequat*‡	2-chloroethyl-trimethyl-ammonium chloride	(CCC†)
lornitrofen*‡	4-nitrophenyl 2,4,6-trichlorophenyl ether	
loroxuron*†‡	*N*-4-(4-chlorophenoxy)phenyl-*N*,*N*-dimethylurea	
lorphonium*‡	tributyl-2,4-dichlorobenzylphosphonium	
lorpropham*†‡	isopropyl *N*-(3-chlorophenyl)carbamate	
lorsulfuron*†	*N'*-(2-chlorobenzenesulphonyl)-*N*-(4-methoxy-6-methyl-1,3,5-triazin-1-yl)urea	
lorthal-dimethyl*‡	2,3,5,6-tetrachloroterephthalic acid dimethyl ester	(DCPA†)
lorthiamid*‡	2,6-dichlorothiobenzamide	
lortoluron*‡	*N'*-(3-chloro-4-methylphenyl)-*N*,*N*-dimethylurea	
sanilide†	2,5-dimethyl-1-pyrrolidine-carboxanilide	
iodinate*	2-chloro-3,5-di-iodo-4-pyridyl acetate	
lofop-isobutyl*	isobutyl 2-[4-(4-chlorophenoxy)phenoxy] propionate	
loprop*	2-(3-chlorophenoxy)propionic acid	
-CPA*†‡	4-chlorophenoxyacetic acid	
yanatryn*	4-(1-cyano-1-methylethylamino)-6-ethylamino-2-methylthio-1,3,5-triazine	
yanazine*†‡	2-chloro-4-(1-cyano-1-methylethylamino)-6-ethylamino-1,3,5-triazine	
ycloate*†	*N'*-cyclohexyl-*N*-ethyl-*S*-ethyl(thiocarbamate)	
ycluron*†‡	*N'*-cyclo-octyl-*N*,*N*-dimethylurea	
yometrinil*	α-(cyanomethoxyimino)benzacetonitrile	
yperquat*†	1-methyl-4-phenylpyridinium	
yprazine*†	2-chloro-4-cyclopropylamino-6-isopropylamino-1,3,5-triazine	
yprazole*†	*N*-[5-(2-chloro-1,1-dimethylethyl)-1,3,4-thiadiazol-2-yl]cyclopropanecarboxamide	
ypromid*†‡	3,4-dichlorocyclopropanecarboxanilide	
,4-D*†‡	2,4-dichlorophenoxyacetic acid	
alapon*†	2,2-dichloropropionic acid	
aminozide*‡	*N*-dimethylaminosuccinamic acid	
azomet*†‡	3,4,5,6-tetrahydro-3,5-dimethyl-1,3,5-thiadiazine-2-thione	
,4-DB*†	4-(2,4-dichlorophenoxy)butyric acid	
CU†	dichloral urea	
elachlor*†‡	α-chloro-*N*-(isobutoxymethyl)-2,6-acetoxylidide	
,4-DES	2-(2,4-dichlorophenoxy)ethyl hydrogen sulphate	(sesone†, disul‡)
esmedipham*†‡	3-(ethoxycarbonylamino)phenyl *N*-phenylcarbamate	
esmetryne*	4-isopropylamino-6-methylamino-2-methylthio-1,3,5-triazine	(desmetryn†‡)
i-allate*‡	*S*-2,3-dichloroallyl *N*,*N*-di-isopropyl(thiocarbamate)	(diallate†)
icamba*†‡	3,6-dichloro-2-methoxybenzoic acid	
ichlobenil*†‡	2,6-dichlorobenzonitrile	

dichlone*†‡	2,3-dichloro-1,4-naphthaquinone	
dichlorflurenol*‡	2,7-dichloro-9-hydroxyfluorene-9-carboxylic acid	
dichlormate*†‡	3,4-dichlorobenzyl *N*-methylcarbamate	
dichlorprop*†‡	(±)-2-(2,4-dichlorophenoxy)propionic acid	
diclofop-methyl*	methyl 2-[4-(2,4-dichlorophenoxy)phenoxy] propionate	(diclofop† [acid])
diethamquat*	1,1′-di(diethylcarbamoylmethyl)-4,4′-bipyridyl-1,1′-diylium	
diethatyl*†‡	*N*-chloroacetyl-*N*-(2,6-diethylphenyl)aminoacetic acid	
difenopenten*†	4-[4-(4-trifluoromethylphenoxy)phenoxy] pent-2-enoic acid	
difenoxuron*†‡	*N′*-4-(4-methoxyphenoxy)phenyl-*N,N*-dimethylurea	
difenzoquat*†	1,2-dimethyl-3,5-diphenyl-pyrazolium	
dikegulac*	2,3:4,6-di-*O*-isopropylidene-α-L-xylo-2-hexulofuranosonic acid	
dimefuron*	4-[2-chloro-4-(3,3-dimethylureido)phenyl] -2-t-butyl-1,3,4-oxadiazolin-5-one	
dimethachlor*	α-chloro-*N*-(2-methoxyethyl)-2′,6′-acetoxylidide	
dimethametryn*	2-(1,2-dimethylpropylamino)-4-ethylamino-6-methylthio-1,3,5-triazine	
dimidazon*†	4,5-dimethoxy-2-phenylpyridazin-3(2*H*)-one	
dimexan*	di(methoxythiocarbonyl)disulphide	(dimexano‡)
dinitramine*†‡	N^1,N^1-diethyl-2,6-dinitro-4-trifluoromethyl-*m*-phenylenediamine	
dinoseb*†‡	2-(1-methylpropyl)-4,6-dinitrophenol	
dinoterb*‡	4,6-dinitro-2-t-butylphenol	
diphenamid*†‡	*N,N*-dimethyl-αα-diphenylacetamide	
dipropetryn*†‡	2-ethylthio-4,6-di(isopropylamino)-1,3,5-triazine	
diquat*†‡	9,10-dihydro-8a,10a-diazoniaphenanthrene	
diuron*†‡	*N′*-(3,4-dichlorophenyl)-*N,N*-dimethylurea	
DNOC*†‡	2-methyl-4,6-dinitrophenol	
DSMA†	disodium methylarsonate	
eglinazine*‡	*N*-(4-chloro-6-ethylamino-1,3,5-triazin-2-yl)aminoacetate	
endothal*	7-oxabicyclo[2,2,1]heptane-2,3-dicarboxylic acid	(endothall†, endothal-sodium[=Na salt‡])
epronaz*	1-(*N*-ethyl-*N*-propylcarbamoyl)-3-propylsulphonyl-1,2,4-triazole	
EPTC*†‡	*S*-ethyl *N,N*-dipropyl(thiocarbamate)	
erbon†‡	2-(2,4,5-trichlorophenoxy)ethyl 2,2-dichloropropionate	
etacelasil*	2-chloroethyltri-(2-methoxyethoxy)silane	
ethalfluralin*†	*N*-ethyl-*N*-(2-methylallyl)-2,6-dinitro-4-trifluoromethylaniline	
ethephon†	2-chloroethylphosphonic acid	
ethidimuron*	*N′*-(5-ethylsulphonyl-1,3,4-thiadiazol-2-yl)-*N,N′*-dimethylurea	
ethiolate*†‡	*S*-ethyl diethylthiocarbamate	
ethofumesate*†	2-ethoxy-2,3-dihydro-3,3-dimethylbenzofuran-5-yl methylsulphonate	
etnipromid*	(±)-2-[5-(2,4-dichlorophenoxy)-2-nitrophenoxy] -*N*-ethylpropionamide	
fenoprop*‡	(±)-2-(2,4,5-trichlorophenoxy)propionic acid	(silvex†)
fenridazon*	1-(4-chlorophenyl)-1,4-dihydro-6-methyl-4-oxopyridazine-3-carboxylic acid	
fenteracol*	2-(2,4,5-trichlorophenoxy)ethanol	
fenuron*†‡	*N,N*-dimethyl-*N′*-phenylurea	
flamprop-isopropyl*	isopropyl (±)-2-(*N*-benzoyl-3-chloro-4-fluoroanilino)propionate	(flamprop† [acid])
flamprop-methyl*	methyl (±)-2-(*N*-benzoyl-3-chloro-4-fluoroanilino)propionate	(flamprop† [acid])
fluazifop*	(±)-2-[4-(5-trifluoromethyl-2-pyridyloxy)phenoxy] propionic acid	
fluchloralin*†‡	*N*-(2-chloroethyl)-2,6-dinitro-*N*-propyl-4-(trifluoromethyl)aniline	
fluometuron*†‡	*N′*-(3-trifluoromethylphenyl)-*N,N*-dimethylurea	
fluoridamid*	3-trifluoromethylsulphonamido-*p*-acetotoluidide	
fluorodifen*†‡	4-nitrophenyl 2-nitro-4-trifluoromethylphenyl ether	
fluoronitrofen*‡	2,4-dichloro-6-fluorophenyl 4-nitrophenyl ether	
fluothiuron*	*N*-(3-chloro-4-chlorodifluoromethylthiophenyl)-*N′,N′*-dimethylurea	
flurecol*†	9-hydroxyfluorene-9-carboxylic acid	(flurenol†‡)
fluridone*†	1-methyl-3-phenyl-5-(3-trifluoromethylphenyl)pyridin-4-one	
fluromidine*‡	6-chloro-2-trifluoromethyl-3*H*-imidazo[4,5-*b*]pyridine	
fomesafen*	2-chloro-4-trifluoromethylphenyl 3-methylphenylcarbamoyl-4-nitrophenyl ether	
fosamine*†‡	ethyl hydrogen carbamoylphosphonate	
GA	gibberellic acid	
glufosinate*	DL-homoalanin-4-yl(methyl)phosphinic acid	
glyphosate*†	*N*-(phosphonomethyl)glycine	
glyphosine*	*N,N*-bis(phosphonomethyl)glycine	
haloxydine*‡	3,5-dichloro-2,6-difluoro-4-hydroxypyridine	
hexaflurate†	potassium hexafluoroarsenate	
hexazinone*†‡	3-cyclohexyl-6-dimethylamino-1-methyl-1,3,5-triazine-2,4-dione	
holosulf*‡	(2-chloroethyl)sulphinic acid	
IAA	indolylacetic acid	
IBA	indolylbutyric acid	
ioxynil*†‡	4-hydroxy-3,5-di-iodobenzonitrile	
isocarbamid*	*N*-isobutylimidazolidin-2-one-1-carboxamide	
isomethiozin*	4-(isobutylideneamino)-3-methylthio-6-t-butyl-1,2,4-triazin-5-one	
isopropalin*†‡	4-isopropyl-2,6-dinitro-*N,N*-dipropylaniline	
isoproturon*	*N′*-(4-isopropylphenyl)-*N,N*-dimethylurea	
isopyrimol*	4-chloro-α-isopropyl-α-(pyrimidin-5-yl)benzyl alcohol	
isouron*†	*N′*-(5-t-butylisoxazol-3-yl)-*N,N*-dimethylurea	
karbutilate*†‡	*m*-(3,3-dimethylureido)phenyl t-butylcarbamate	
lenacil*†‡	3-cyclohexyl-6,7-dihydro-1*H*-cyclopentapyrimidine-2,4-(3*H*,5*H*)dione	
linuron*†‡	*N′*-(3,4-dichlorophenyl)-*N*-methoxy-*N*-methylurea	
MAMA†	monoammonium methylarsonate	
MCPA*†‡	4-chloro-2-methylphenoxyacetic acid	
MCPA-thioethyl*‡	*S*-ethyl 4-chloro-2-methylphenoxythioacetate	
MCPB*†‡	4-(4-chloro-2-methylphenoxy)butyric acid	
mecoprop*†‡	(±)-2-(4-chloro-2-methylphenoxy)propionic acid	
medinoterb*‡	4,6-dinitro-5-methyl-2-t-butylphenol	
mefluidide*†	5-trifluoromethylsulphonylamino-2,4-acetoxylidide	
mepiquat*‡	1,1-dimethylpiperidinium ion	
metamitron*	4-amino-3-methyl-6-phenyl-1,2,4-triazin-5(4*H*)-one	
metazachlor*	α-chloro-*N*-(1-pyrazolylmethyl)aceto-2′,6′-xylidide	
metflurazone*‡	4-chloro-5-(dimethylamino)-2-(3-trifluoromethylphenyl)pyridazin-3(2*H*)-one	
methabenzthiazuron*‡	*N*-(benzothiazol-2-yl)-*N,N′*-dimethylurea	
methalpropalin*†‡	*N*-methylallyl-2,6-dinitro-*N*-propyl-4-trifluoromethylaniline	
metham*†	*N*-methyldithiocarbamic acid	(metam-sodium [=Na salt]‡)
methazole†	2-(3,4-dichlorophenyl)-4-methyl-1,2,4-oxadiazolidine-3,5-dione	
methiobencarb*‡	*S*-(4-methoxybenzyl) *N,N*-diethylthiolcarbamate	
methometon*‡	2-methoxy-4,6-bis(3-methoxypropylamino)-1,3,5-triazine	
methoprotryne*‡	4-isopropylamino-6-(3-methoxypropylamino)-2-methylthio-1,3,5-triazine	
metobromuron*†‡	*N′*-(4-bromophenyl)-*N*-methoxy-*N*-methylurea	

tolachlor*† α-chloro-6-ethyl-*N*-(2-methoxy-1-methylethyl)-*o*-acetotoluidide
toxuron*‡ *N'*-(3-chloro-4-methoxyphenyl)-*N,N*-dimethylurea
tribuzin*†‡ 4-amino-6-t-butyl-3-(methylthio)-1,2,4-triazin-5(4*H*)-one
†† 1,2,3,6-tetrahydro-3,6-dioxopyridazine
linate*†‡ *S*-ethyl *N,N*-hexamethylene(thiocarbamate)
malide*‡ *N*-(4-chlorophenyl)-2,2-dimethylvaleramide
molinuron*†‡ *N'*-(4-chlorophenyl)-*N*-methoxy-*N*-methylurea
nuron*†‡ *N'*-(4-chlorophenyl)-*N,N*-dimethylurea
rfamquat*‡ 1,1'-bis(3,5-dimethylmorpholinocarbonylmethyl)-4,4'-bipyridylium
MA† monosodium methylarsonate
A 1-naphthylacetic acid
propamide*† *N,N*-diethyl-2-(α-naphthoxy)propionamide
ptalam*†‡ *N*-1-naphthylphthalamic acid
uron*†‡ *N*-butyl-*N'*-(3,4-dichlorophenyl)-*N*-methylurea
ralin*†‡ 4-(methylsulphonyl)-2,6-dinitro-*N,N*-dipropylaniline
rofen*†‡ 2,4-dichlorophenyl 4-nitrophenyl ether
rofluorfen*† 2-chloro-4-trifluoromethylphenyl 4-nitrophenyl ether
flurazon*†‡ 4-chloro-5-methylamino-2-(3-trifluoromethylphenyl)pyridazin-3-one
uron*‡ *N'*-(hexahydro-4,7-methanoindan-5-yl)-*N,N*-dimethylurea (norea†)
zalin*†‡ 3,5-dinitro-N^4N^4-dipropylsulphanilamide
adiazon*†‡ 3-(2,4-dichloro-5-isopropoxyphenyl)-5-t-butyl-1,3,4-oxadiazolin-2-one
yfluorfen*† 2-chloro-4-trifluoromethylphenyl 3-ethoxy-4-nitrophenyl ether
raquat*†‡ 1,1'-dimethyl-4,4'-bipyridylium
P† pentachlorophenol
bulate*†‡ *S*-propyl *N*-butyl-*N*-ethyl(thiocarbamate)
ndimethalin*†‡ *N*-(1-ethylpropyl)-2,6-dinitro-3,4-xylidine
ntanochlor*‡ *N*-(3-chloro-4-methylphenyl)-2-methylpentanamide (solan†)
fluidone*† 4'-(phenylsulphonyl) trifluoromethylsulphono-*o*-toluidide
enisopham* 3-isopropoxycarbonylaminophenyl *N*-ethyl-*N*-phenylcarbamate
enmedipham*†‡ 3-(methoxycarbonylamino)phenyl *N*-(3-methylphenyl)carbamate
enmedipham-ethyl*‡ 3-ethoxycarbonylaminophenyl *N*-(3-methylphenyl)carbamate
enobenzuron*‡ *N'*-benzoyl-*N'*-(3,4-dichlorophenyl)-*N,N*-dimethylurea
cloram*†‡ 4-amino-3,5,6-trichloropicolinic acid
berophos* *S*-2-methyl-1-piperidylcarbonylmethyl *O,O*-di-n-propyl phosphorodithioate
broctanyl*‡ 1-allyl-1-(3,7-dimethyloctyl)piperidinium ion
tilachlor*‡ α-chloro-2,6-diethyl-*N*-(2-propoxyethyl)acetanilide
bcyazine*† 2-chloro-4-(1-cyano-1-methylethylamino)-6-cyclopropylamino-1,3,5-triazine
bdiamine*‡ 2,6-dinitro-N^1,N^1-dipropyl-4-trifluoromethyl-*m*-phenylenediamine
bfluralin*† *N*-(cyclopropylmethyl)-2,6-dinitro-*N*-propyl-4-trifluoromethylaniline
bglinazine*‡ *N*-(4-chloro-6-isopropylamino-1,3,5-triazin-2-yl)aminoacetate
bmeton*‡ 4,6-bisisopropylamino-2-methoxy-1,3,5-triazine (prometone†)
bmetryne*‡ 4,6-bisisopropylamino-2-methylthio-1,3,5-triazine (prometryn†‡)
bpachlor*†‡ α-chloro-*N*-isopropylacetanilide
bpanil*†‡ *N*-(3,4-dichlorophenyl) propionamide
bpazine*†‡ 2-chloro-4,6-bisisopropylamino-1,3,5-triazine
bpham*†‡ isopropyl *N*-phenylcarbamate
bpyzamide* 3,5-dichloro-*N*-(1,1-dimethylpropynyl)benzamide (pronamide†)
bsulfalin*† *N*-(4-dipropylamino-3,5-dinitrophenylsulphonyl)-*S,S*-dimethylsulphimide
ynachlor*†‡ 2-chloro-*N*-(1-methyl-2-propynyl)acetanilide
danon*‡ (±)-hexahydro-4-hydroxy-3,6-dioxopyridazin-4-ylacetic acid
razone (see chloridazon)
ridate* octyl *O*-(6-chloro-3-phenylpyridazin-4-yl)carbonothioate
inonamid* 3-chloro-2-dichloroacetamido-1,4-naphthaquinone
buthylazine*‡ 2-chloro-4-ethylamino-6-s-butylamino-1,3,5-triazine
bumeton*†‡ 4-ethylamino-2-methoxy-6-s-butylamino-1,3,5-triazine
duron*†‡ *N*-(2-methylcyclohexyl)-*N*-phenylurea
nazine*†‡ 2-chloro-4,6-bisethylamino-1,3,5-triazine
netryne* 4,6-bisethylamino-2-methylthio-1,3,5-triazine (simetryn†‡)
MA sodium monochloroacetate
lfallate*‡ 2-chloroallyl *N,N*-diethyldithiocarbamate (CDEC†)
lglycapin*‡ *O*-(methylsulphamoyl)glycollic acid hexamethylene imide
ep† methyl *N*-(3,4-dichlorophenyl)carbamate
4,5-T*†‡ 2,4,5-trichlorophenoxyacetic acid
4,5-TB*‡ 4-(2,4,5-trichlorophenoxy)butyric acid
3,6-TBA†‡ 2,3,6-trichlorobenzoic acid
CA†‡ trichloroacetic acid (sodium trichloroacetate [=Na salt]‡)
buthiuron*†‡ *N,N'*-dimethyl-*N*-(5-t-butyl-1,3,4-thiadiazol-2-yl)urea
rbacil*† 5-chloro-6-methyl-3-t-butyluracil
rbucarb*‡ 2,6-di-t-butyl-*p*-tolyl *N*-methylcarbamate (terbutol†)
rbuchlor*† *N*-butoxymethyl-α-chloro-6-t-butyl-*o*-acetotoluidide
rbumeton*‡ 4-ethylamino-2-methoxy-6-t-butylamino-1,3,5-triazine
rbuthylazine*†‡ 2-chloro-4-ethylamino-6-t-butylamino-1,3,5-triazine
rbutryne* 4-ethylamino-2-methylthio-6-t-butylamino-1,3,5-triazine (terbutryn†‡)
trafluron*† *N,N*-dimethyl-*N'*-[3-(1,1,2,2-tetrafluoroethoxy)phenyl] urea
iazafluron* 1,3-dimethyl-1-(5-trifluoromethyl 1,3,4-thiadazol-2-yl)urea
idiazuron* *N*-phenyl-*N'*-(1,2,3-thiadiazol-5-yl)urea
iobencarb*†‡ *S*-(4-chlorobenzyl) *N,N*-diethylthiolcarbamate
IBA 2,3,5-triiodobenzoic acid
i-allate*‡ *S*-2,3,3-trichloroallyl *N,N*-di-isopropyl(thiocarbamate) (triallate†)
iclopyr*† 3,5,6-trichloro-2-pyridyloxyacetic acid
ietazine*†‡ 2-chloro-4-diethylamino-6-ethylamino-1,3,5-triazine
ifluralin*†‡ 2,6-dinitro-*N,N*-dipropyl-4-trifluoromethylaniline
ifop-methyl* methyl 2-[4-(4-trifluoromethylphenoxy)phenoxy] propionate
imeturon*† *N'*-(4-chlorophenyl)-*O,N,N*-trimethylisourea
ipropindan*‡ 6-isopropyl-1,1,4-trimethyl-5-propionylindane
rnolate*†‡ *S*-propyl *N,N*-dipropyl(thiocarbamate)

COMMON CROP NAMES

Though both crop and weed species are indexed by their Latin name, commonly occurring crop species are cited in the abstracts by their vernacular name only. These common crop species are listed below with their botanical name as an aid to their identification in the index.

Alfalfa – *Medicago sativa*
Apple – *Malus*
Asparagus – *Asparagus officinalis*
Aubergine – *Solanum melongena*
Banana – *Musa sapientum*
Barley – *Hordeum vulgare*
Bean, cluster – *Cyamopsis tetragonoloba*
Bean, field/broad/horse – *Vicia faba*
Bean, French/snap – *Phaseolus vulgaris*
Bean, lima – *Phaseolus lunatus*
Bean, mung – *Vigna radiata*
Bean, scarlet runner – *Phaseolus coccineus*
Beet, fodder – *Beta vulgaris*
Beet, garden/red – *Beta vulgaris*
Beet, sugar – *Beta vulgaris*
Bent, common/colonial – *Agrostis tenuis*
Bent, creeping – *Agrostis stolonifera*
Bermuda grass – *Cynodon dactylon*
Birdsfoot trefoil – *Lotus corniculatus*
Blueberry – *Vaccinium*
Bluegrass, Kentucky – *Poa pratensis*
Brinjal – *Solanum melongena* var. *esculentum*
Brome, smooth – *Bromus inermis*
Brussels sprout – *Brassica oleracea* var. *gemmifera*
Cabbage – *Brassica oleracea* var. *capitata*
Carrot – *Daucus carota*
Cassava – *Manihot esculenta*
Celery – *Apium graveolens* var. *dulce*
Chickpea – *Cicer arietinum*
Chilli – *Capsicum annuum*
Clover – *Trifolium*
Clover, red – *Trifolium pratense*
Clover, subterranean – *Trifolium subterraneum*
Clover, white – *Trifolium repens*
Cocksfoot – *Dactylis glomerata*
Coconut – *Cocos nucifera*
Coffee – *Coffea*
Corn – *Zea mays*
Cotton – *Gossypium*
Cotton, American/upland – *Gossypium hirsutum*
Cowpea – *Vigna unguiculata*
Cucumber – *Cucumis sativus*
Currant, black – *Ribes nigrum*
Currant, red – *Ribes rubrum*
Eggplant – *Solanum melongena* var. *esculentum*
Fescue, meadow – *Festuca pratensis*
Fescue, red – *Festuca rubra*
Fescue, tall – *Festuca arundinacea*
Fir, Douglas – *Pseudotsuga menziesii*
Flax, fibre – *Linum usitatissimum*
Garlic – *Allium sativum*
Gooseberry – *Ribes grossularia*
Gram, golden/green – *Vigna radiata*
Grape – *Vitis vinifera*
Groundnut – *Arachis hypogaea*
Hop – *Humulus lupulus*
Jute – *Corchorus*
Kale, marrowstem – *Brassica oleracea* var. *acephala*
Kenaf – *Hibiscus cannabinus*
Leek – *Allium porrum*
Lentil – *Lens culinaris*
Lettuce – *Lactuca sativa*
Linseed – *Linum usitatissimum*
Lucerne – *Medicago sativa*
Lupin – *Lupinus*
Lupin, blue – *Lupinus angustifolius*
Lupin, white – *Lupinus albus*
Lupin, yellow fodder – *Lupinus luteus*
Maize – *Zea mays*
Meadowgrass, smoothstalked – *Poa pratensis*
Melon, musk – *Cucumis melo*
Melon, water – *Citrullus vulgaris*
Millet, bread/proso/common – *Panicum miliaceum*
Millet, bulrush/pearl – *Pennisetum americanum*
Millet, finger – *Eleusine coracana*
Mustard, white – *Sinapis alba*
Oat – *Avena sativa*
Oil-palm – *Elaeis guineensis*
Okra – *Hibiscus esculentus*
Olive – *Olea europaea*
Onion – *Allium cepa*
Orange, sweet – *Citrus sinensis*
Orchardgrass – *Dactylis glomerata*
Pea – *Pisum sativum*
Pear – *Pyrus communis*
Pecan – *Carya illinoensis*
Pepper, red – *Capsicum annuum*
Pigeon pea – *Cajanus cajan*
Pine – *Pinus*
Pine, jack – *Pinus banksiana*
Pine, loblolly – *Pinus taeda*
Pine, lodgepole – *Pinus contorta*
Pine, Monterey – *Pinus radiata*
Pine, ponderosa – *Pinus ponderosa*
Pine, Scots – *Pinus sylvestris*
Pineapple – *Ananas comosus*
Potato – *Solanum tuberosum*
Pumpkin – *Cucurbita pepo*
Radish – *Raphanus sativus*
Rape – *Brassica napus*
Rape, oilseed – *Brassica napus* var. *oleifera*
Rape, turnip – *Brassica campestris*
Raspberry – *Rubus idaeus*
Rice – *Oryza sativa*
Rubber – *Hevea brasiliensis*
Rye – *Secale cereale*
Ryegrass, annual/Italian – *Lolium multiflorum*
Ryegrass, perennial – *Lolium perenne*
Safflower – *Carthamus tinctorius*

Shallot – *Allium ascalonicum*
Sorghum – *Sorghum bicolor*
Southern pea – *Vigna unguiculata*
Soybean – *Glycine max*
Spinach – *Spinacia oleracea*
Spruce – *Picea*
Spruce, Norway – *Picea abies*
Squash – *Cucurbita pepo*
Strawberry – *Fragaria*
Sugarcane – *Saccharum officinarum*
Tea – *Camellia sinensis*
Timothy – *Phleum pratense*
Tobacco – *Nicotiana tabacum*
Tomato – *Lycopersicon esculentum*
Turnip – *Brassica campestris*
Wheat – *Triticum*